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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,760	01/04/2002	Anthony A. Sauve	96700/725	6299

1912 7590 12/01/2004

AMSTER, ROTHSTEIN & EBENSTEIN  
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NEW YORK, NY 10016

EXAMINER

MCINTOSH III, TRAVISS C

ART UNIT PAPER NUMBER

1623

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



## Office Action Summary

**Application No.**

10/038,760

**Applicant(s)**

SAUVE ET AL.

**Examiner**

Traviss C McIntosh

**Art Unit**

1623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 and 30-37 is/are pending in the application.
- 4a) Of the above claim(s) 6-9, 12, 13, 16, 17, 20 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 10, 11, 14, 15, 18, 19 and 30-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |



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### **DETAILED ACTION**

The Amendment filed August 23, 2004 has been received, entered into the record, and carefully considered. The following information provided in the amendment affects the instant application by:

Claim 1 has been amended.

The status of the claims is as follows:

Claims 1-21 and 30-37 are pending.

Claims 6-9, 12-13, 16-17, and 20-21 are withdrawn.

Claims 22-29 are canceled.

Remarks drawn to rejections of Office Actions mailed 7/23/04 and 2/6/2004 include:

112 1<sup>st</sup> paragraph rejections; which have been overcome by applicant's amendments and have been withdrawn.

102(b) rejection: which has been overcome by applicant's amendments and has been withdrawn.

An action on the merits of claims 1-5, 10-11, 14-15, 18-19, and 30-37 is contained herein below.

The text of those sections of Title 35, US Code which are not included in this action can be found in a prior Office action.

### ***Election/Restrictions***

Applicant's election without traverse of group I in the reply filed on August 23, 2004 is acknowledged. Applicants election of the species nicotinamide-2'-deoxyriboside is acknowledged. Moreover, it is noted that the elected species was not found in a search, and thus,



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the requirement for an election of species is hereby withdrawn and group I will be examined in the instant application.

***Claim Rejections - 35 USC § 112***

Claims 1-5, 10-11, 14-15, 18-19, and 30-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 includes the limitation of “**substituted** pyridyl...” in the fourth line under the structure. In the absence of the identity of moieties which are intended to be substituted, thus modifying an art recognized chemical core, described structurally or by chemical name, the identity of “substituted” would be difficult to ascertain. In the absence of said moieties, the claims containing the term “substituted” are not described sufficiently to distinctly point out that which applicant intends as the invention.

Claim 2 provides that A is an N-linked aryl group, however, there is insufficient antecedent basis for this limitation in the claim, as claim 1 only provides that A is a nicotinamide, pyridyl, or pyrimidyl group, which are all heteroaryl groups. Aryl groups are formed by the removal of a hydrogen, and thus must still have their core carbon ring structure.

Claims 4 and 5 are drawn to various 2'-deoxyribose containing moieties. However, there is insufficient antecedent basis for this limitation in the claims, as the recitation of a ribose moiety would require that claim 1, from which these claims depend, would comprise the moiety OH as an optional variable in defining D. Since D of claim 1 does not include an OH group as an option, the subsequent claims containing ribose lack antecedent basis.



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Claim 14-15, and 33-35 recites the limitation "a primary alcohol" in the claims. There is insufficient antecedent basis for this limitation in the claims, as claim 1, from which they ultimately depend, does not provide for the possibility of a primary alcohol function in the D position.

All claims which depend from an indefinite claim are also indefinite. *Ex parte Cordova, 10 U.S.P.Q. 2d 1949, 1952 (P.T.O. Bd. App. 1989).*

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

It is noted that if applicants were to amend claim 1 to include OH for D, claims 1-3, 10-11, 14-15, 18-19, 30, 33, and 36 will be rejected under 35 U.S.C. 102(b) as being anticipated by Togo et al., ("A Facile Preparative Method of C-Nucleosides", Chemistry Letters, vol 9, 1992, pp. 1673-1676).

Togo et al. disclose 2'-deoxyribose compounds having pyrimidyl and substituted pyridyl groups attached (see table 1).



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***Conclusion***

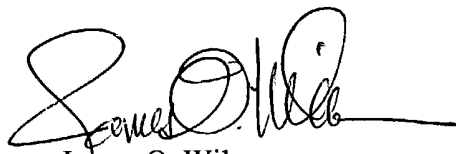
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Traviss C McIntosh whose telephone number is 571-272-0657.

The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Traviss C. McIntosh III  
November 23, 2004



James O. Wilson  
Supervisory Patent Examiner  
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